

**VISIT TO THE DEPARTMENT OF ECONOMICS, PONTIFÍCIA
UNIVERSIDADE CATÓLICA DO RIO DE JANEIRO (PUC-RJ)**

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This assessment is based on extensive conversations with Professor Dionísio Diaz Carneiro, Chairman of the Department, Professor Marcelo de Paiva Abreu, Research Coordinator of the Department, and Professors José Márcio Camargo and Rogério Werneck, currently financed by IRDC, as well as brief discussions with Dr. Marcelo Lara Resende, Chief Economic Advisor to the Governor of Guanabara, and Professor Isaac Kerstenetsky, currently teaching both at PUC and the Federal University.

This assessment also bears in mind that IRDC is currently financing somewhere between five and ten percent of the overall research budget of the economics group at PUC. This amount is small but it does supply some critical input particularly in hard currency.

1. Overview of institutional purpose and structure

The economics group at PUC is basically a teaching department, which also does research. It is thus quite different from the other institutions

funded in the IRDC macro-network.

There is considerable intellectual tension between the teaching side and the research side of the Department's activities, even if the same people are involved in both. The teaching program is very mainline, it emphasizes a straight neo-classical curriculum of the Anglo-Saxon kind. At the same time, the research going on has been quite innovative and by no means bound by the mainline literature. Yet the applied research undertaken by the Department members and their innovations have not found their way into the teaching program to any significant extent. This is a rather peculiar situation, yet there does not seem to be any major pressure for change.

The Departmental structure gives solidity and stability to the research enterprise. Continuity of funding is assured because of the teaching revenues and a peer review structure is built in as a result of the collegiality of teaching. Thus the atmosphere of the place is reminiscent of that of any major Anglo-Saxon university.

2. Relevance and quality of research

The PUC has made a contribution of national importance in the macro field, and it is generally credited with having developed major pieces of the

Cruzado Plan before its implementation. The faculty members from PUC rotated into the government in the early stages of the plan and later rotated back out, however, not always back to the university. The PUC group is still regarded as being the basic academic opinion former of the country, with influence on public policy partly through direct participation, but mostly through their influence on other economists.

Of particular note is the econometric model developed at PUC which is used as a fulcrum around which to analyze current policy and short-term prospects. The regular quartely forecast and the discussions generated thereby have become a standard feature on the Brazilian economic scene.

While the econometric model and its use continue to be an important activity, as a source of intellectual innovation its marginal product is declining. Not surprisingly, therefore, the group is looking in new directions, and appear to have two views, which have already received some IDRC funding. The first leads towards disaggregation of the economy, recognizing that for an economy as complex as Brazil's, a one-sector description is insufficient. A second line of progress leads towards greater depth in the analysis of market behavior and market structure, in order to provide a more realistic micro underpinning to the macro equations.

Both directions seem sensible moves from a core macro model which one wishes to expand and bring closer to the changing reality of an economy which is continually bumping against various kinds of ceilings which cause structural discontinuities. They both also present major problems which will make progress slow.

Disaggregation starts by breaking out the government sector in greater detail. This is an area in which Werneck has already done some work in order to get a better handle on the fiscal situation particularly in the public enterprises. Along the way, the sources and uses of government savings have received extensive analysis. However, it becomes rapidly necessary to disaggregate the production structure and thus the use of input-output analysis is a logical step. However, input-output analysis has much more extensive data needs than macro-econometric modeling. Moreover, substantial new methodological questions arise. For instance, while it is plausible to argue in favor of the stability of material input coefficients, no similar argument can be made for the stability of sourcing coefficients. Indeed, one of the salient empirical facts of Latin American economies is the instability of the import coefficient. As domestic suppliers come close to producing near capacity, using sectors will switch abruptly

from buying additional amounts of domestically produced inputs to importing from abroad what they can no longer obtain at home. Thus, import coefficients are closely tied to capacity utilization, which in turn is very sensitive to the level of activity. On the export side, a similar situation has been observed in Brazil, where the boom of the early Cruzado period dramatically changed the allocation coefficients of output, shifting quantities intended for the foreign market to the domestic market.

Unfortunately, input-output analysis is not ideally suited for use with varying coefficients. It becomes necessary, therefore, to go to some version of computable general equilibrium models. These, however, have even greater data needs, requiring a large number of direct and cross elasticities, unless very heroic assumptions are made. Moreover, the overall behavior of this class of models depends crucially on the closure assumptions made. Thus what extensive research and calibration exercises are needed before a CGE model can be regarded as being a reliable predictor of actual behavior of the economy.

Finally, there is a question of the time frame of modeling which is relevant in a move from an ordinary macro-econometric model to an input-output type analysis. One difficulty arises in being able to generate

an adequate lag structure for the multi-sectoral context which the input-output analysis tends to capture. Without such a lag structure, one can at best give a forecast of the comparative static positions, which is not very useful if economic cycles type questions are being addressed. Indeed, the interaction between PUC's short-term macro model and their new input-output work is an issue to which Professor Werneck is giving some thought to and for which, of course, it is premature to expect a complete answer.

Delving into market structure and into the behavior of economic agents is the another dimension in which a short-term macro model can be made more realistic. The choice of the labor market as a first item to be worked on is a natural one, given the extensive theoretical and empirical analysis which exists of this market. Professor Camargo is indeed well underway in this direction. However, it is not clear whether for Brazil's modern sector, this is the most important market to analyse. Indeed, it may well be the case that the behavior of enterprises is more important than the behavior of workers. Entrepreneurial decision making in as unpredictable a situation as that of Brazil is motivated by a number of factors which are not well captured by the standard profit-maximizing

assumptions. Rather, strategic behavior of various kinds acquires enormous importance. Yet research in this area is complicated and expensive. Moreover, PUC is not well located geographically for such an effort, since the relevant part of this community is overwhelmingly situated in Sao Paulo rather than in Rio. Finally, survey work or in-depth interviews are very costly in terms of time, staff, and money, all of which are in short supply. These elements, probably, will all interact to restrict the PUC effort to the labor market and some other more theoretical exploration, but preclude delving first hand into the reality of business decision making.

- Whatever the difficulties, the past performance of PUC in economic research indicates that they will pursue their chosen research path with vigour and imagination. One can thus look forward with interest to seeing what results they will come up with.

3. Dissemination of intellectual product:

The PUC group publishes extensively, very much along the pattern of the Anglo-Saxon universities, ranging from discussion papers through articles in learned journals.

Publication occurs to a significant extent in English, which has brought PUC under some criticism in Brazil, on the grounds that "nobody" locally

can read the material! Indeed, it appears that the Brazilian intellectual market is large enough so that English-language publication is not prestigious. Rather, coverage in the national press is what matters. Nonetheless, PUC researchers feel that their international prestige is based in part on journal publication and intend to continue publishing abroad.

4. Renewal of human capital

Intellectual stimulation for the staff is provided by the environment from several sources. In the first place, Brazil is a very large country, with lively economic discussion internally. Secondly, the Master's Program at PUC is a high level program and comprises students from around the Continent. These young minds provide stimulating challenge and by bringing in the realities of countries different from Brazil. Finally, there is a well-established tradition of travel abroad although funding is based more on the haphazards of individual invitations than on a systematic program.

The new research departures will require substantial more interaction with individuals abroad during the gear-up phase. This will be true both in the assimilation of the input-output type techniques for disaggregating the macro model as well as on the labor side. However, on the latter, more of the research is in Latin America and done by Latin Americans and thus

more readily accessible. It remains true, however, that for the gear-up phase, at least, a fair amount of importing of technique and thinking will be needed.

5. Recommendations

PUC is a high quality institution and well-recognized as such. It has its own intellectual dynamics, and can be relied upon to continue providing good quality work.

A useful direction for the group to move in is to substantially expand its Latin American connections. These have been growing through the IDRC Network and through the Master's Program, but can use substantial reinforcement. Translation of papers into Spanish for publication and circulation would be useful. Systematic exchange of working papers with relevant research institutions in Spanish-speaking Latin America would help and much more extensive travel outside Brazil to other parts of Latin America would also make a contribution. These efforts would be more productive if they were organized in a systematic fashion and properly funded rather than occurring haphazardly. Indeed, translation and dissemination will hardly be effective if it is not systematically undertaken.

Another innovation which would be fruitful is that of sabbaticals. These would be useful for PUC faculty to go abroad, particularly to other Latin American countries, but they would also be useful to fund visitors at PUC for stays of three months and up. Again, money is particularly scarce for visitors from other Latin American countries who usually do not have their funding of their own.

Brazil is sufficiently different from the rest of Latin America so that exchanges with the Spanish-speaking countries amount to almost a cross-cultural experience. Particularly in matters of economic structure and policy making, contrasting Brazil with some of its neighbors is an undertaking which cannot avoid having a highly productive result.